



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,261	09/20/2001	Mark Myatt	500.819US1	5390
27530	7590	10/05/2006	EXAMINER	
NELSON MULLINS RILEY & SCARBOROUGH, LLP			KOHUT, DAVID M	
1320 MAIN STREET, 17TH FLOOR			ART UNIT	PAPER NUMBER
COLUMBIA, SC 29201			3691	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/960,261	MYATT ET AL.	
	Examiner David M. Kohut	Art Unit 3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-39 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 20 September 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>17 June 2003</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION*Drawings*

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the following as described in the specification: In Figure 2, the drawing fails to show the event actually occurring. The illustration of the event will help with understanding the flow diagram. Applicant is requested to add this to the drawing. In Figure 3, the drawing fails to show where the reservation amount is determined. Again, Applicant is requested to add this to the drawing to help with clarification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3624

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 322. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:
- a. Page 2, line 15, change "metric" to "metrics";
 - b. Page 3, line 28, add "of" between "diagram" and "an";
 - c. Page 6, lines 13, 15, and 28, add the descriptive character 140 after wireless device;
 - d. Page 6, line 20, add the descriptive character 102 after balance manager;
 - e. Page 7, line 2, add the descriptive character 120 after Convergent billing system;
 - f. Page 8, line 15, add descriptive character 204 after account;
 - g. Page 8, line 27, change "than" to "then";
 - h. Page 9, line 2, remove "the" from in front of the phrase "...100 messages...";

- i. Page 10, Table 1, the constant “CreditLowWaterMark” does not contain an adequate description. Applicant is requested to make this description more clear;
- j. Page 12, line 2, add descriptive character 314 after “successful reservation”;
- k. Page 12, line 2, add descriptive character 318 after “failure”;
- l. Page 12, line 17, add descriptive character 314 after “duration”
- m. Page 12, line 17-18, describes a current reservation amount reserved against the account, but is not shown in the drawings;
- n. Page 13, line 26, add descriptive character 322 after “duration”;
- o. Page 14, line 23, add “in” after “...does not result...”.

Appropriate correction is required.

- 4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

- p. Claim 8, line 8, contains the phrase “...fetching the available credit...” which does not have antecedent basis. Examiner interprets this phrase to mean “...fetching available credit...” Applicant is requested to make the appropriate change.
- q. Claim 14, line 18, contains the phrase “...to the minimum service unit quantity...” which does not have antecedent basis. Examiner interprets this phrase to mean “...to a minimum service unit quantity...” Applicant is requested to make the appropriate change.
- r. Claim 27, line 10, contains the phrase “...calculating a reservation amount...” Examiner interprets this phrase to mean “...calculating the reservation amount...” since

“...a reservation amount...” is referenced on line 8. Applicant is requested to make the appropriate change.

s. Claim 27, line 12, contains the phrase “...the available credit...” which does not have antecedent basis. Examiner interprets this phrase to mean “...fetching available credit...” Applicant is requested to make the appropriate change.

t. Claim 33, line 22, contains the phrase “...to the minimum service unit quantity...” which does not have antecedent basis. Examiner interprets this phrase to mean “...to a minimum service unit quantity...” Applicant is requested to make the appropriate change.

u. Claim 39, line 16, contains the phrase “...against the pre-paid account” which does not have antecedent basis. Examiner interprets this phrase to mean “...against a pre-paid account.” Applicant is requested to make the appropriate change.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-39 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 1 recites “...determining a service unit quantity based on the reservation amount...” It is unclear as to what is done with the calculated service unit quantity information. For examination purposes, Examiner interprets this phrase to mean that the reservation amount is converted into a service unit quantity balance that is reduced as the event occurs.

8. Claim 2 contains the same deficiencies as claim 1 and additionally includes the non-functional descriptive material. As the service unit quantity is sent to a device generating the event data, it is unclear as to what the device is doing with the service unit quantity information. For examination purposes, Examiner interprets this claim to mean a message is sent to a device.

9. Claims 3-7 contain the same deficiencies as claim 1, and as such, are rejected for the same reasons.

10. Claim 8 authorizes an event if the reservation amount is less than the available credit. However, if the reservation amount is greater than the available credit nothing occurs and therefore this claim is indefinite. For examination purposes, Examiner interprets this claim to authorize the event after the service unit quantity and the reservation amount are adjusted.

11. Claim 9 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. Claim 9 contains a reference to “the service unit quantity.” However, it is unclear whether this is the “default” or “adjusted” service unit quantity. In addition, it is unclear why the functions described in this claim would be conducted after an authorization event has occurred. Applicant is requested to clarify and make the appropriate corrections.

12. Claim 10 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 10 contains a reference to “the previously calculated service unit quantity,” which does not have proper antecedent basis and it is unclear what is meant by this term. Applicant is requested to clarify and make the appropriate corrections.

13. Claim 11 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 11 completes a function after determining whether an event is a free event, but completes the function whether it is or not. For examination purposes, Examiner

interprets this claim to mean that the event is authorized if the event is a free event and if not, then the event is unauthorized.

14. Claim 12 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 12 describes the comparison of the reservation amount to the available credit, but does not provide a result if either the condition is met or not met.

15. Claim 13 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons.

16. Claim 14 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, it is unclear what will happen if the rating algorithm counter does not exceed a pre-determined amount. It is also unclear what function or purpose the rating algorithm counter performs. Applicant is requested to make the appropriate corrections.

17. Claim 15 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 15 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Also, there is no indication as to what happens with the output of the calculation that is completed. Applicant is requested to make the appropriate corrections.

18. Claim 16 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 16 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

19. Claim 17 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 17 contains reference to “the service unit quantity,” but it is unclear

whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

20. Claim 18 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 18 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

21. Claim 19 contains the same deficiencies as claim 8, and as such, is rejected for the same reasons. In addition, claim 19 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

22. Claim 20 recites “...determining a service unit quantity based on the reservation amount...” It is unclear as to what is done with the calculated service unit quantity information. For examination purposes, Examiner interprets this phrase to mean that the reservation amount is converted into a service unit quantity balance that is reduced as the event occurs.

23. Claim 21 contains the same deficiencies as claim 20 and additionally includes non-functional descriptive material. As the service unit quantity is sent to a device generating the event data, it is unclear as to what the device is doing with the service unit quantity information. For examination purposes, Examiner interprets this claim to mean a message is sent to a device.

24. Claims 22-26 contain the same deficiencies as claim 20, and as such, are rejected for the same reasons.

25. Claim 27 authorizes an event if the reservation amount is less than the available credit. However, if the reservation amount is greater than the available credit nothing occurs and

therefore this claim is indefinite. For examination purposes, Examiner interprets this claim to authorize the event after the service unit quantity and the reservation amount are adjusted.

26. Claim 28 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. Claim 28 contains a reference to “the service unit quantity.” However, it is unclear whether this is the “default” or “adjusted” service unit quantity. In addition, it is unclear why the functions described in this claim would be conducted after an authorization event has occurred. Applicant is requested to clarify and make the appropriate corrections.

27. Claim 29 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 28 contains a reference to “the previously calculated service unit quantity,” which does not have proper antecedent basis and it is unclear what is meant by this term. Applicant is requested to clarify and make the appropriate corrections.

28. Claim 30 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 30 completes a function after determining whether an event is a free event, but completes the function whether it is or not. For examination purposes, Examiner interprets this claim to mean that the event is authorized if the event is a free event and if not, then the event is unauthorized.

29. Claim 31 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 31 describes the comparison of the reservation amount to the available credit, but does not provide a result if either the condition is met or not met.

30. Claim 32 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons.

Art Unit: 3624

31. Claim 33 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, it is unclear what will happen if the rating algorithm counter does not exceed a pre-determined amount. Applicant is requested to make the appropriate corrections.

32. Claim 34 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 34 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Also, there is no indication as to what happens with the output of the calculation that is completed. Applicant is requested to make the appropriate corrections.

33. Claim 35 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 35 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

34. Claim 36 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 36 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

35. Claim 37 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 37 contains reference to “the service unit quantity,” but it is unclear whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

36. Claim 38 contains the same deficiencies as claim 27, and as such, is rejected for the same reasons. In addition, claim 38 contains reference to “the service unit quantity,” but it is unclear

Art Unit: 3624

whether this is the “default” or “adjusted” service unit quantity. Applicant is requested to make the appropriate corrections.

37. Claim 39 recites “...determining a service unit quantity based on the reservation amount...” It is unclear as to what is done with the calculated service unit quantity information. For examination purposes, Examiner interprets this phrase to mean that the reservation amount is converted into a service unit quantity balance that is reduced as the event occurs.

Claim Rejections - 35 USC § 101

38. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

39. Claims 8-19 and 27-38 are rejected under 35 U.S.C. 101 because the claimed invention does not produce a “useful, concrete and tangible result.” *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F.3d 1368, 1373; 47 USPQ2d 1596, 1601-02.

40. Claim 8 only produces a tangible result if the reservation amount is less than the available credit. If the reservation amount is not less than the available credit, then no tangible result exists. Applicant is requested to make appropriate changes without adding new matter.

41. Claim 9 does not cure the deficiencies set forth in claim 8, and as such, is rejected for the same reasons. In addition, even if claim 8 produced a tangible result, claim 9 would still be rejected because the claim does not provide a tangible result if the service unit quantity is more than the minimum service unit quantity. Applicant is requested to make appropriate changes without adding new matter.

42. Claim 10 does not cure the deficiencies set forth in claim 8, and as such, is rejected for the same reasons. In addition, even if claim 8 produced a tangible result, claim 10 would still be

Art Unit: 3624

rejected because the claim instructs to perform some action without providing a tangible result.

Applicant is requested to make appropriate changes without adding new matter.

43. Claim 11 does not cure the deficiencies set forth in claim 8, and as such, is rejected for the same reasons.

44. Claim 12 does not cure the deficiencies set forth in claim 8, and as such, is rejected for the same reasons. In addition, even if claim 8 produced a tangible result, claim 12 would still be rejected because the claim merely provides a formula without any type of tangible result.

Applicant is requested to make appropriate changes without adding new matter.

45. Claim 13 does not cure the deficiencies set forth in claim 8, and as such, is rejected for the same reasons.

46. Claim 14 does not cure the deficiencies set forth in claim 8, and as such, is rejected for the same reasons. In addition, even if claim 8 produced a tangible result, claim 14 would still be rejected because the claim does not produce a tangible result if a rating algorithm counter does not exceed a pre-determined count. Applicant is requested to make appropriate changes without adding new matter.

47. Claims 15-19 do not cure the deficiencies set forth in claim 8, and as such, are rejected for the same reasons.

48. Claim 27 only produces a tangible result if the reservation amount is less than the available credit. If the reservation amount is not less than the available credit, then no tangible result exists. Applicant is requested to make appropriate changes without adding new matter.

49. Claim 28 does not cure the deficiencies set forth in claim 27, and as such, is rejected for the same reasons. In addition, even if claim 27 produced a tangible result, claim 28 would still

be rejected because the claim does not provide a tangible result if the service unit quantity is more than the minimum service unit quantity. Applicant is requested to make appropriate changes without adding new matter.

50. Claim 29 does not cure the deficiencies set forth in claim 27, and as such, is rejected for the same reasons. In addition, even if claim 27 produced a tangible result, claim 29 would still be rejected because the claim instructs to perform some action without providing a tangible result. Applicant is requested to make appropriate changes without adding new matter.

51. Claim 30 does not cure the deficiencies set forth in claim 27, and as such, is rejected for the same reasons.

52. Claim 31 does not cure the deficiencies set forth in claim 27, and as such, is rejected for the same reasons. In addition, even if claim 27 produced a tangible result, claim 31 would still be rejected because the claim merely provides a formula without any type of tangible result. Applicant is requested to make appropriate changes without adding new matter.

53. Claim 32 does not cure the deficiencies set forth in claim 27, and as such, is rejected for the same reasons.

54. Claim 33 does not cure the deficiencies set forth in claim 27, and as such, is rejected for the same reasons. In addition, even if claim 27 produced a tangible result, claim 33 would still be rejected because the claim does not produce a tangible result if a rating algorithm counter does not exceed a pre-determined count. Applicant is requested to make appropriate changes without adding new matter.

55. Claims 34-38 do not cure the deficiencies set forth in claim 8, and as such, are rejected for the same reasons.

Claim Rejections - 35 USC § 102

56. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

57. Claims 1-4, 8-10, 12-13, 15-16, and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al., U.S. Patent No. 5,995,822.

58. As per claim 1, Smith et al. teaches a method of receiving event data, i.e. making a set up request such as an incoming or outgoing call (see column 5, lines 45-47); calculating a reservation amount based on the event data, i.e. calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 3, lines 56-58); determining a service unit quantity based on the reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and reserving the reservation amount against the prepaid account, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). For all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

59. As per claim 2, Smith et al. teaches the method of claim 1 as described above. Smith et al. further teaches sending the service unit quantity to a device generating the event data, i.e. a timer is started to keep track of the minutes that have been allocated to the call (see column 6, lines 42-44).

Art Unit: 3624

60. As per claim 3, Smith et al. teaches the method of claim 1 as described above. Smith et al. further teaches a method for receiving an event corresponding to the depletion of the service unit quantity, i.e. call is continued until the timer times out (see column 7, line 4); calculating a second reservation amount, i.e. the method proceeds back to step 106 to be repeated and calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 7, lines 5-6 and column 3, lines 56-58); determining a second service unit quantity based on the second reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and reserving the second reservation amount against the pre-paid account, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

61. As per claim 4, Smith et al. teaches the method of claim 1 as described above. Smith et al. further teaches the method where the service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of “ α ” minutes (see column 6, lines 7-8).

62. As per claim 8, Smith et al. teaches the method of receiving a wireless event, i.e. a mobile telephone call set up (see column 3, lines 39 and 58); calculating a reservation amount based on a duration initially set to a default service unit quantity, i.e. calculates an amount “ a ” that represents a call of predetermined duration (see column 6, lines 7-8); fetching an available credit in a pre-paid account, i.e. accesses the pre-paid account information for the calling subscriber

(see column 6, lines 10-11); comparing the reservation amount with the available credit, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 11-13); if the reservation amount is less than the available credit, then authorizing the event for the default service unit quantity, i.e. the SSF then sets up and connects the call to the called party (see column 6, lines 50-51); otherwise performing the task of: adjusting the service unit quantity, i.e. calculates the amount of calling duration “ δ ” that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17); recalculating the reservation amount based on the adjusted service unit, i.e. deducts this corresponding value in that account from the SDF database (see column 6, lines 30-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

63. As per claim 9, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches comparing the service unit quantity to a minimum service unit quantity, i.e. SCF determines whether the calling duration “ δ ” calculated at step 110 is at least greater than or equal to a predetermined minimum call duration (see column 6, lines 17-20); sending an authorization failure if the service unit quantity is less than the minimum service unit quantity, i.e. if not, at step 112, SCF 12 orders the SSF 20 to send an “announcement” message to the calling subscriber that the cost of the call is not covered by the pre-paid account, and the call set up attempt is disconnected (see column 6, lines 21-25). Examiner is interpreting the “service unit quantity” to be either the default or the adjusted service unit quantity.

Art Unit: 3624

64. As per claim 10, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches adjusting the service unit quantity by multiplying the previously calculated service unit quantity by a pre-determined percentage, i.e. calculate the amount of calling duration “ δ ” that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17). The pre-determined percentage in Smith et al. is 100% of the remaining balance.

65. As per claim 12, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches determining if the reservation amount is appropriate by determining if the available credit is less than the reservation amount, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 12-13); and the available credit is less than or equal to the CreditLowWatermark or the reservation amount is less than the available credit times the CreditPerCallPercentage, i.e. the calling duration “ δ ” is at least greater than or equal to a predetermined minimum call duration “ γ ” (see column 6, lines 18-20). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

66. As per claim 13, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches determining a new reservation amount according to the formula if the available credit times the CreditPerCallPercentage is less than or equal to the Credit LowWaterMark, then the new reservation amount equals the CreditLowWaterMark, i.e. if the SCF determines that the calling duration “ δ ” calculated is at least greater than or equal to the predetermined minimum call duration “ γ ”, then the remaining value “ d ” of the account is deducted from the account (see column 6, lines 52-56); else the new reservation amount is equal

to the available credit times the CreditPerCallPercentage, i.e. if the value in the account is greater than or equal to the value “a” corresponding to the predetermined duration of a call, the SCF deducts this corresponding value in that account from the SDF database (see column 6, lines 26-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

67. As per claim 15, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches the method where a rating engine receives the service unit quantity and applies a tariff to the service unit quantity, i.e. the SCF calculates an amount “a” that represents a call of predetermined duration (see column 6, lines 7-8).

68. As per claim 16, Smith et al. teaches the method of claim 8 as described above. Smith et al. further teaches the method where the service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of “ α ” minutes (see column 6, lines 7-8).

69. As per claim 39, Smith et al. teaches a system comprising a rating engine, i.e. the system contains an Intelligent Network Service Control Function (see column 1, lines 28 and 52); a balance manager operative to maintain a database having accounts, said accounts having an account balance, i.e. a subscription for each pre-paid customer is stored in a subscriber database in a system’s IN node which contains information such as the number of charging units to be used for the payment of a call (see column 1, lines 42-43); wherein the balance manager is operative to perform the task of: receiving event data, i.e. making a set up request such as an incoming or outgoing call (see column 5, lines 45-47); calculating a reservation amount based on

the event data, i.e. calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 3, lines 56-58); determining a service unit quantity based on the reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and reserving the reservation amount against the prepaid account, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). For all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61).

70. Claims 8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Seiderman, U.S. Patent No. 5,550,897.

71. As per claim 11, Seiderman teaches the method of claim 8, as described above, but only up to the portion where a wireless event is received. After that point, claim 11 requires that the method determine whether the event is free and does not continue on with any other elements of claim 8. In fact, claim 11 specifically does not allow the reservation amount to be compared to the available credit. Therefore, Seiderman teaches receiving a wireless event, i.e. prompt the user to receive information regarding the making of telephone calls (see column 8, lines 40-44); and determining if the event is a free event, i.e. determine whether the user has activated one of the free call interrupt controls (see column 8, lines 50-51); and return a successful authorization prior to comparing the reservation amount with the available credit, i.e. permit the user to bypass the credit verification features of the system and directly call a predetermined telephone number or the 911 emergency operator (see column 9, lines 4-8).

Claim Rejections - 35 USC § 103

72. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

73. Claims 5-7, 17-19, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Dedrick, U.S. Patent No. 6,016,509.

74. As per claim 5, Smith et al. teaches a method of claim 1, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

75. As per claim 6, Smith et al. teaches the method of claim 1, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have

been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

76. As per claim 7, Smith et al. teaches the method of claim 1, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

77. As per claim 17, Smith et al. teaches the method of claim 8, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

78. As per claim 18, Smith et al. teaches the method of claim 8, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message

Art Unit: 3624

quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

79. As per claim 19, Smith et al. teaches the method of claim 8, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

80. As per claim 24, Smith et al. teaches the method of claim 20, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art

Art Unit: 3624

would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

81. As per claim 25, Smith et al. teaches the method of claim 20, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

82. As per claim 26, Smith et al. teaches the method of claim 20, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

83. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Berglund, U.S. Patent No. 6,122,256.

84. As per claim 14, Smith et al. teaches the method of claim 8 as described above. However, Smith et al. does not explicitly teach what happens if a rating algorithm counter exceeds a pre-determined count. Berglund does teach setting the second unit quantity to the minimum service unit quantity if a rating algorithm counter exceeds a pre-determined count, i.e. when the loop counter reaches a limit value indicating that the current loop status has differed from the established value in the Network Wrap Mode for several cycles, the Network Wrap Mode is changed to reflect the new state as indicated by the values of wrapfwd and wraprev (see column 12, lines 37-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of preventing spurious and intermittent network communication failures (see column 12, lines 34-36 of Berglund).

85. Claims 20-23, 27-29, 31-32, and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Danneels et al., U.S. Patent No. 6,272,472.

86. As per claim 20, Smith et al. teaches a method of receiving event data, i.e. making a set up request such as an incoming or outgoing call (see column 5, lines 45-47); calculating a reservation amount based on the event data, i.e. calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 3, lines 56-58); determining a service unit quantity based on the reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and reserving the reservation amount against the prepaid account, i.e. amount is withdrawn from the account and

allocated to the call being set up (see column 3, lines 59-60). For all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61). However, Smith et al. does not explicitly teach providing these executable instructions on a machine-readable medium. Danneels et al., however, teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46.) In addition, Danneels et al. teaches that the programs are storable on a machine-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

87. As per claim 21, Smith et al. teaches the method of claim 20 as described above. Smith et al. further teaches sending the service unit quantity to a device generating the event data, i.e. a timer is started to keep track of the minutes that have been allocated to the call (see column 6, lines 42-44).

88. As per claim 22, Smith et al. teaches the method of claim 20 as described above. Smith et al. further teaches a method for receiving an event corresponding to the depletion of the service unit quantity, i.e. call is continued until the timer times out (see column 7, line 4); calculating a second reservation amount, i.e. the method proceeds back to step 106 to be repeated and calculates an amount that is large enough to cover the cost for a call of a typical duration (see column 7, lines 5-6 and column 3, lines 56-58); determining a second service unit quantity

based on the second reservation amount, i.e. an amount that is large enough to cover the cost for a call of a typical duration (e.g. 4 minutes)(see column 3, lines 56-58); and reserving the second reservation amount against the pre-paid account, i.e. amount is withdrawn from the account and allocated to the call being set up (see column 3, lines 59-60). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.).

89. As per claim 23, Smith et al. teaches the method of claim 20 as described above. Smith et al. further teaches the method where the service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of “ ∞ ” minutes (see column 6, lines 7-8).

90. As per claim 27, Smith et al. teaches the method of receiving a wireless event, i.e. a mobile telephone call set up (see column 3, lines 39 and 58); calculating a reservation amount based on a duration initially set to a default service unit quantity, i.e. calculates an amount “a” that represents a call of predetermined duration (see column 6, lines 7-8); fetching an available credit in a pre-paid account, i.e. accesses the pre-paid account information for the calling subscriber (see column 6, lines 10-11); comparing the reservation amount with the available credit, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 11-13); if the reservation amount is less than the available credit, then authorizing the event for the default service unit quantity, i.e. the SSF then sets up and connects the call to the called party (see column 6, lines 50-51); otherwise performing the task of: adjusting the service unit quantity, i.e. calculates the amount of calling duration “ δ ” that

corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17); recalculating the reservation amount based on the adjusted service unit, i.e. deducts this corresponding value in that account from the SDF database (see column 6, lines 30-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.). However, Smith et al. does not explicitly teach providing these executable instructions on a machine-readable medium. Danneels et al., however, teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46.) In addition, Danneels et al. teaches that the programs are storable on a machine-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Goodwin. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

91. As per claim 28, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches comparing the service unit quantity to a minimum service unit quantity, i.e. SCF determines whether the calling duration “ δ ” calculated at step 110 is at least greater than or equal to a predetermined minimum call duration (see column 6, lines 17-20); sending an authorization failure if the service unit quantity is less than the minimum service unit quantity, i.e. if not, at step 112, SCF 12 orders the SSF 20 to send an “announcement” message to the calling subscriber that the cost of the call is not covered by the pre-paid account, and the call set

up attempt is disconnected (see column 6, lines 21-25). Examiner is interpreting the “service unit quantity” to be either the default or the adjusted service unit quantity.

92. As per claim 29, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches adjusting the service unit quantity by multiplying the previously calculated service unit quantity by a pre-determined percentage, i.e. calculate the amount of calling duration “ δ ” that corresponds to the value remaining in the pre-paid account (see column 6, lines 15-17). The pre-determined percentage in Smith et al. is 100% of the remaining balance.

93. As per claim 31, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches determining if the reservation amount is appropriate by determining if the available credit is less than the reservation amount, i.e. determine if there is a value in that account which is large enough for the call to be started (see column 6, lines 12-13); and the available credit is less than or equal to the CreditLowWatermark or the reservation amount is less than the available credit times the CreditPerCallPercentage, i.e. the calling duration “ \square ” is at least greater than or equal to a predetermined minimum call duration “ \square ” (see column 6, lines 18-20). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.).

94. As per claim 32, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches determining a new reservation amount according to the formula if the available credit times the CreditPerCallPercentage is less than or equal to the Credit LowWaterMark, then the new reservation amount equals the CreditLowWaterMark, i.e. if the

SCF determines that the calling duration “ \square ” calculated is at least greater than or equal to the predetermined minimum call duration “ \square ”, then the remaining value “d” of the account is deducted from the account (see column 6, lines 52-56); else the new reservation amount is equal to the available credit times the CreditPerCallPercentage, i.e. if the value in the account is greater than or equal to the value “a” corresponding to the predetermined duration of a call, the SCF deducts this corresponding value in that account from the SDF database (see column 6, lines 26-31). Again, for all intents and purposes, Examiner interprets the deduction from the account to be equal to a reservation amount since it takes an amount out of the initial account balance and returns any unused amount back into the pre-paid account (see column 3, lines 58-61 of Smith et al.).

95. As per claim 34, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches the method where a rating engine receives the service unit quantity and applies a tariff to the service unit quantity, i.e. the SCF calculates an amount “a” that represents a call of predetermined duration (see column 6, lines 7-8).

96. As per claim 35, Smith et al. teaches the method of claim 27 as described above. Smith et al. further teaches the method where the service unit quantity comprises a time duration, i.e. an amount is calculated that represents a call of a predetermined duration of “ α ” minutes (see column 6, lines 7-8).

97. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Seiderman, U.S. Pat. No. 5,550,897 and Dedrick, U.S. Patent No. 6,016,509.

98. As per claim 30, Smith et al. teaches the method of claim 27 as described above. In addition, Seiderman teaches receiving a wireless event, i.e. prompt the user to receive information regarding the making of telephone calls (see column 8, lines 40-44); and determining if the event is a free event, i.e. determine whether the user has activated one of the free call interrupt controls (see column 8, lines 50-51); and return a successful authorization prior to comparing the reservation amount with the available credit, i.e. permit the user to bypass the credit verification features of the system and directly call a predetermined telephone number or the 911 emergency operator (see column 9, lines 4-8). However, neither Smith et al. nor Seiderman explicitly teach providing these executable instructions on a machine-readable medium. Danneels et al., however, teaches a computer-implemented method realized as one or more programs on a computer (see column 2, lines 40-46.) In addition, Danneels et al. teaches that the programs are storable on a machine-readable medium such as a floppy disk or a CD-ROM (see column 2, lines 46-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Goodwin. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of distribution and installation and execution of the software on another computer (see column 7, lines 46-49 of Danneels et al.).

99. Claims 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Dedrick, U.S. Patent No. 6,016,509 and Danneels et al., U.S. Patent No. 6,272,472.

100. As per claim 36, Smith et al. teaches a method of claim 27, as described above. However, Smith et al. does not explicitly teach the search unit quantity comprising a storage unit

quantity. Dedrick, however, does teach billing a client on a per byte or word of information viewed by the end user, which are types of storage unit quantities (see column 4, line 67 through column 5, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of billing may be desirable when the end user is accessing a database (see column 5, lines 2-5 of Dedrick).

101. As per claim 37, Smith et al. teaches the method of claim 27, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a message quantity. Dedrick, however, teaches a cost type of a one-time charge for a unit of information, wherein the end user is granted access to the unit of information for the life of the unit (see column 5, lines 12-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this would allow the end user to access information upon command (see column 5, lines 8-10 of Dedrick).

102. As per claim 38, Smith et al. teaches the method of claim 27, as described above. However, Smith et al. does not explicitly teach a service unit quantity comprising a token quantity. Examiner interprets a token to refer to an authorization to send information to other computers. Dedrick, however, teaches a cost type of pay per view method, wherein the end user pays an associated cost each time the user consumes a unit of information (see column 4, lines 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature because this type of payment may be desirable for

information which is typically seldom consumed by the end user (see column 4, lines 65-67 of Dedrick).

103. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al., U.S. Pat. No. 5,995,822 in view of Berglund, U.S. Patent No. 6,122,256 and Danneels et al., U.S. Patent No. 6,272,472.

104. As per claim 33, Smith et al. and Danneels et al. teach the method of claim 27 as described above. However, Smith et al. does not explicitly teach what happens if a rating algorithm counter exceeds a pre-determined count. Berglund does teach setting the second unit quantity to the minimum service unit quantity if a rating algorithm counter exceeds a pre-determined count, i.e. when the loop counter reaches a limit value indicating that the current loop status has differed from the established value in the Network Wrap Mode for several cycles, the Network Wrap Mode is changed to reflect the new state as indicated by the values of wrapfwd and wraprev (see column 12, lines 37-41). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the system of Smith. One of ordinary skill in the art would have been motivated to incorporate this feature for the purpose of preventing spurious and intermittent network communication failures (see column 12, lines 34-36 of Berglund).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Kohut, Esq. whose telephone number is 571-270-1369. The examiner can normally be reached on M-Th 730-5 w/1st Fri off. 2nd Fri 730-4.
2. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Nolan can be reached on 571-272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DMK
9/19/2006

Pat J. Nolan
**PATRICK J. NOLAN, PH.D.
SUPERVISORY PATENT EXAMINER**